

SUBSPECIFIC NAMES FOR TWO COMMON  
PACIFIC COAST ANDRENA

(Hymenoptera: Andrenidae)

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Collectors on the Pacific Coast have long recognized that the representative of *Andrena cressonii* Robertson found there differed from the typical form, the almost complete lack of tergal hair bands in both sexes giving it an appearance very different from that of the eastern *cressonii*. Several names have been applied to *A. cressonii*, but none of these can be used as a subspecific name for the far western form. The type localities of these are from the Rocky Mountains eastward, and, although two (*bridwelli* Cockerell and *dubia* Robertson) represent variations which have face markings in the male approaching the condition which is normal in the Pacific Coast form, the characteristically infasciate condition of the terga of the latter is not found in unworn eastern specimens.

*Andrena cressonii infasciata* Lanham, new subspecies

*Female*. Like typical *cressonii*, but differing in the following details: only short lateral patches of hair present on terga 2-4, although 4 with a very sparse band of hair medially; clypeus duller, more coarsely reticulate, punctures near middle more closely crowded.

Length, approximately 10 mm.; anterior wing, 8.5 mm.

*Male*. Terga without apical hair bands; sculpture of frons coarser than in typical *cressonii*; clypeus with entire apical margin black, lower margin of yellow not neatly defined at middle of clypeus as in typical *cressonii*, lateral yellow face marks not nearly reaching to bases of antennae, only about one-third as large as in typical *cressonii*.

Length, approximately 9 mm.; anterior wing 7 mm.

*Holotype*, female (Calif. Acad. Sci., Ent. No. 6132): 4 mi. N. W. ORINDA, CALIF., 27 March, 1948, *Brassica* (C. C. and U. N. Lanham). *Allotype*, male (Calif. Acad. Sci., Ent. No. 6133): same data as holotype. *Paratypes*: 3 females, 3 males, same data as holotype (except one male from *Salix*); Berkeley, Calif., 11 March, 1947, *Brassica*, 1 female (J. W. MacSwain), 27-30 March, 1948, 1 female, 8 males (P. D. Hurd, U. N. Lanham), 6 April, 1948, *Brassica*, 2 males, (P. D. H.), 16 May, 1948, *Pyracantha*,

1 female (P. D. H.); 8 mi. E. of Pinole, Calif., 23 March, 1947, swept from mixed *Brassica* and *Ranunculus*, 19 females, 6 males (P. D. Hurd, C. C. and U. N. Lanham); Saranap, Calif., 20 March, 1948, 1 female, 6 males (U. N. L.); Danville, Calif., 20 March, 1948, 14 males (U. N. L.). All of these localities are on the east side of San Francisco Bay; some are east of the Berkeley Hills. Additional specimens, not included in the paratype series, are from the following localities: Black's Mtn., Lassen Co., Calif., 13 June, 1941, 2 females (P. D. H.); Big Spring, Shasta Co., Calif., 23 May, 1941, 1 female; Yosemite Valley, Calif., 16 June, 1935, 1 female (E. G. Linsley). I have seen specimens referable to this subspecies from Riverside, California and Washington State; the extent of its range eastward is not known to me at present.

*A. cressonii infasciata* appears to be of somewhat larger average size than *cressonii* from Illinois. There is some variation in the development of the tergal bands, but the present subspecies almost never has the hair band on tergum 3 even approaching completeness, while it is usually complete in females of the typical form. The entire apical margin of the clypeus is black in all males of the paratype series of *A. c. infasciata*, and one male (not stylopized) lacks yellow face marks entirely; other specimens show intermediate degrees of loss of face markings. The rather uncommon eastern *A. dubia* Robertson and *A. bridwelli* Cockerell have the face with yellow markings similarly restricted (apical margin of clypeus black); since these names were based on male specimens, and no constantly differing females have been recognized in the eastern fauna, at present it seems best to regard these as synonyms of *cressonii* Robertson. Conclusive evidence of neither geographic races nor sibling species has yet been demonstrated in *cressonii* from the Rocky Mountains eastward. Because of the appreciable amount of convergent variability in the eastern and western forms, the lack of differences in the male genitalia, and the fact that they are apparently allopatric, *infasciata* is given only subspecific rank. *A. cressonii cressonii* has been seen from Boulder, Colorado, and the Atlantic Coast near Washington, D. C.; the type locality is Carlinville, Illinois.

*Andrena osmioides benitonis* Lanham, new subspecies

This is a dark form of *osmioides*, in which the hairs of the head are mostly black, instead of all white, as in the typical form.

*Female*. Like nominate *osmioides*, except for the following differences in coloration of the pubescence: hair of head dark brownish-black, except that hairs about bases of antennae are somewhat lighter, although dusky; some dusky hairs at sides of propodeum; hairs of all segments of front legs black, hind tibial scopa black.

Length, approximately 11 mm.; anterior wing, 9.5 mm.

*Male*. Appears to be exactly like nominate *osmioides*, except that there are a few dusky hairs at the extreme lateral margins of the face. Length, about 9.5 mm.; anterior wing, 7.5 mm.

*Holotype*, female (Calif. Acad. Sci., Ent. No. 6134): PINNACLES NATIONAL MONUMENT, SAN BENITO CO., CALIF., 24 April, 1948, *Cryptantha* (P. D. Hurd). *Allotype*, male (Calif. Acad. Sci., Ent. No. 6135): same data as holotype. *Paratypes*: 1 female, 2 males, same data as holotype; Pinnacles, Calif., 25 March, 1940, *Cryptantha*, 5 females (E. G. Linsley); Jamesburg, Monterey Co., Calif., 22 March, 1940, 16 females (E. G. Linsley). Additional specimens referable to this subspecies, but not included in the paratype series, are 18 females from San Antonio Valley, Santa Clara Co., Calif., 20 April, 1948 (Ray F. Smith).

This subspecies is a more northern representative of *osmioides*, the typical form having been described from Claremont, California. Numerous individuals from Riverside, California, all had the pubescence of the head entirely white. There is slight variation in coloration in the paratype series of *A. o. benitonis*, an occasional specimen having nearly white hairs on the front femora or having the scopal hairs more or less white. The series from San Antonio Valley, approximately 75 miles north of the type locality of *benitonis*, are uniformly with dark heads and legs, and perhaps have the lower pleural hairs darker than do the Pinnacles or Jamesburg specimens. Three specimens of *osmioides* seen from the region north of San Francisco Bay indicate that the form occupying that area may be one which continues the trend to dark coloration northward, since they had not only the hair of the head and legs, but also that of the pleura black. Very few specimens have been seen from the western foothills of the Sierras, on the eastern edge of the Central Valley, but a single female from Auburn, Placer Co., Calif., has only a few black hairs on the face, and the pubescence elsewhere has a strong reddish tinge; it is possible that another subspecies occupies this area.

I am indebted to the authorities in charge of the California Insect Survey collection at the University of California, Berkeley, for the loan of material; paratypes of the new subspecies are to be found in that collection.